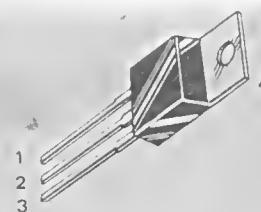


Motorola TO-220

PLASTIC POWER TRANSISTORS



For lead mounted applications or use
with heat sinks; power dissipation
of 40 to 100 watts at 25°C case.

STYLE 1:
PIN 1. BASE
2. COLLECTOR
3. Emitter
4. COLLECTOR

I_C (cont) Amps	$V_{CEO(sus)}$ Volts	Resistive Switching								P_D (Case) Watts	
		Device Type		h_{FE}	I_C Amp	t_s us	t_f us	I_C Amp	f_T MHz		
		NPN	PNP								
				Min/Max	Max	Max	Max	Amp	Min	@ 25°C	
0.5	350	MJE2360T		15 min	0.1				10 typ	30	
		MJE2361T		40 min	0.1				10 typ	30	
1	40	TIP29	TIP30	15/75	1	0.6 typ	0.3 typ	1	3	30	
	60	TIP29A	TIP30A	15/75	1	0.6 typ	0.3 typ	1	3	30	
	80	TIP29B	TIP30B	15/75	1	0.6 typ	0.3 typ	1	3	30	
	100	TIP29C	TIP30C	15/75	1	0.6 typ	0.3 typ	1	3	30	
	250	TIP47		30/150	0.3	2 typ	0.18 typ	0.3	10	40	
	300	TIP48		30/150	0.3	2 typ	0.18 typ	0.3	10	40	
	350	TIP49		30/150	0.3	2 typ	0.18 typ	0.3	10	40	
	400	TIP50		30/150	0.3	2 typ	0.18 typ	0.3	10	40	
2	60	TIP110‡	TIP115‡	500 min	2	1.7 typ	1.3 typ	2	25**	50	
	80	TIP111‡	TIP116‡	500 min	2	1.7 typ	1.3 typ	2	25**	50	
	100	TIP112‡	TIP117‡	500 min	2	1.7 typ	1.3 typ	2	25**	50	
3	40	TIP31	TIP32	25 min	1	0.6 typ	0.3 typ	1	3	40	
	60	TIP31A	TIP32A	25 min	1	0.6 typ	0.3 typ	1	3	40	
	75	MJE1909		20/150	0.5				100	10	
	80	TIP31B	TIP32B	25 min	1	0.6 typ	0.3 typ	1	3	40	
	100	TIP31C	TIP32C	25 min	1	0.6 typ	0.3 typ	1	3	40	
4	45	2N6121	2N6124	25/100	1.5	0.4 typ	0.3 typ	1.5	2.5	40	
	60	2N6122	2N6125	25/100	1.5	0.4 typ	0.3 typ	1.5	2.5	40	
	80	2N6123	2N6126	20/80	1.5	0.4 typ	0.3 typ	1.5	2.5	40	
	300			6/30	3	3	0.7	3	4	60	
	400			6/30	3	3	0.7	3	4	60	
5	60	TIP120‡	TIP125‡	1k min	3	1.5 typ	1.5 typ	3	4**	65	
	80	TIP121‡	TIP126‡	1k min	3	1.5 typ	1.5 typ	3	4**	65	
	100	TIP122‡	TIP127‡	1k min	3	1.5 typ	1.5 typ	4	4**	75	
	250	MJE51T		5 min	5	2 typ†		2.5	2.5	80	
		2N6497#		10/75	2.5	1.8	0.8	2.5	5	80	
	300	MJE52T		5 min	5	2 typ†		2.5	2.5	80	
		2N6498#		10/75	2.5	1.8	0.8	2.5	5	80	
	350	MJE53T		5 min	5	2 typ†		2.5	2.5	80	
		2N6499#		10/75	2.5	1.8	0.8	2.5	5	80	
6	40	TIP41	TIP42	15/75	3	0.4 typ	0.15 typ	3	3	65	
	60	TIP41A	TIP42A	15/75	3	0.4 typ	0.15 typ	3	3	65	
	80	TIP41B	TIP42B	15/75	3	0.4 typ	0.15 typ	3	3	65	
	100	TIP41C	TIP42C	15/75	3	0.4 typ	0.15 typ	3	3	65	
7	30	2N6288	2N6111	30/150	3	0.4 typ	0.15 typ	3	4	40	
	50	2N6290	2N6109	30/150	2.5	0.4 typ	0.15 typ	3	4	40	
	70	2N6292	2N6107	30/150	3	0.4 typ	0.15 typ	3	4	40	
8	40	2N6386‡		1k/20k	3				20**	65	
	60	2N6043‡	2N6040‡	1k/10k	4	1.5 typ	1.5 typ	3	4**	75	
		TIP100‡	TIP105‡	1k/20k	3	1.5 typ	1.5 typ	3	4**	80	
	80	2N6044‡	2N6041‡	1k/10k	4	1.5 typ	1.5 typ	3	4**	75	
	100	TIP101‡	TIP106‡	1k/20k	3	1.5 typ	1.5 typ	3	4**	80	
		2N6045‡	2N6042‡	1k/10k	3	1.5 typ	1.5 typ	3	4**	75	
	120	TIP102‡	TIP107‡	1k/20k	3	1.5 typ	1.5 typ	3	4**	80	
	150	●MJE15028	●MJE15029	40 min	3				30	50	
		●MJE15030	●MJE15031	40 min	3				30	50	
	300			6/30	5	3	0.7	5	4	80	
	400			6/30	5	3	0.7	5	4	80	
10	60	MJE2801T	MJE2901T	25/100	3					75	
		MJE3055T	MJE2955T	20/70	4					75	
	80	2N6387‡		1k/20k	5				20**	65	
		2N6388‡		1k/20k	5				20**	65	
	●D44H10	●D45H10		20 min	4				50 typ	50	
	●D44H11	●D45H11		40 min	4				50 typ	50	
12	300			6/30	8	3	0.7	8	4	100	
	400			6/30	8	3	0.7	8	4	100	
15	40	2N6486	2N6489	20/150	5	0.6 typ	0.3 typ	5	5	75	
	60	2N6487	2N6490	20/150	5	0.6 typ	0.3 typ	5	5	75	
	80	2N6488	2N6491	20/150	5	0.6 typ	0.3 typ	5	5	75	

● New Device ‡ Darlington # Switchmode Device † t_{off} ** h_{fe} at 1 MHz